9/14 24216 MWB

APPALACHIAN MOUNTAIN ADVOCATES

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September 10, 2015

By Certified Mail – Return Receipt Requested

Thomas S. Brown
President
Coal-Mac Inc.
Cityplace One, Suite 300
St. Louis, MO 63141

RECEIVED
2015 SEP 14 PM 2:30
OFFICE OF ENFORCEMENT

Re: 60-Day Notice of Intent to File Citizen Suit Under Clean Water Act Section 505(a)(1) for Violations of Terms and Conditions of West Virginia NPDES Permits WV0068764, WV0053091, WV0064858, and WV1020561. 60-Day Notice of Intent to File Citizen Suit Under the Federal Surface Mining Control and Reclamation Act Section 520(a)(1) for Violations of Federal and State Regulations and Permit Conditions of West Virginia Surface Mining Permits S007280, R000667, P060600, O001381, U501995, and S501301.

Dear Mr. Brown,

The Sierra Club, Ohio Valley Environmental Coalition, and the West Virginia Highlands Conservancy (collectively "citizen groups") in accordance with section 550 of the Clean Water Act (the "Act" or the "CWA") 33 U.S.C. § 1365, and 40 C.F.R. Part 135, hereby notify you that Coal-Mac, Inc. ("Coal-Mac") has violated and continues to violate "an effluent standard or limitation by failing to comply with the terms and conditions of the West Virginia/National Pollution Discharge Elimination System ("WVNPDES") Permits WV0053091, WV0064858, and WV1020561. If within sixty days of the postmark of this letter Coal-Mac does not bring itself into full compliance with the Act, we intend to file a citizen's suit seeking civil penalties for Coal-Mac's ongoing and continuing violations and for an injunction compelling it to come into compliance with the Act.

We also notify you, in accordance of section 505 of the CWA, 33 U.S.C. § 1365, and 40 C.F.R. Part 135, that Coal-Mac has violated and continues to violate "an effluent standard or limitation" under Section 505(a)(1)(A) of the Act, 33 U.S.C. § 1365(a)(1)(A) and (f)(5), by failing to comply with the terms and conditions of a CWA § 401 certification issued by the West Virginia Department of Environmental Protection ("WVDEP"), in conjunction with Coal-Mac's Section 404 permit for the Phoenix 4 Surface Mine. If within sixty days of the postmark of this letter Coal-Mac does not bring itself into full compliance with the conditions of the § 401 certification for its Phoenix 4 Mine, we intend to file a citizen's suit seeking civil penalties for Coal-Mac's ongoing and continuing violations and for an injunction compelling it to come into compliance with the CWA.

AX-15-001-3839

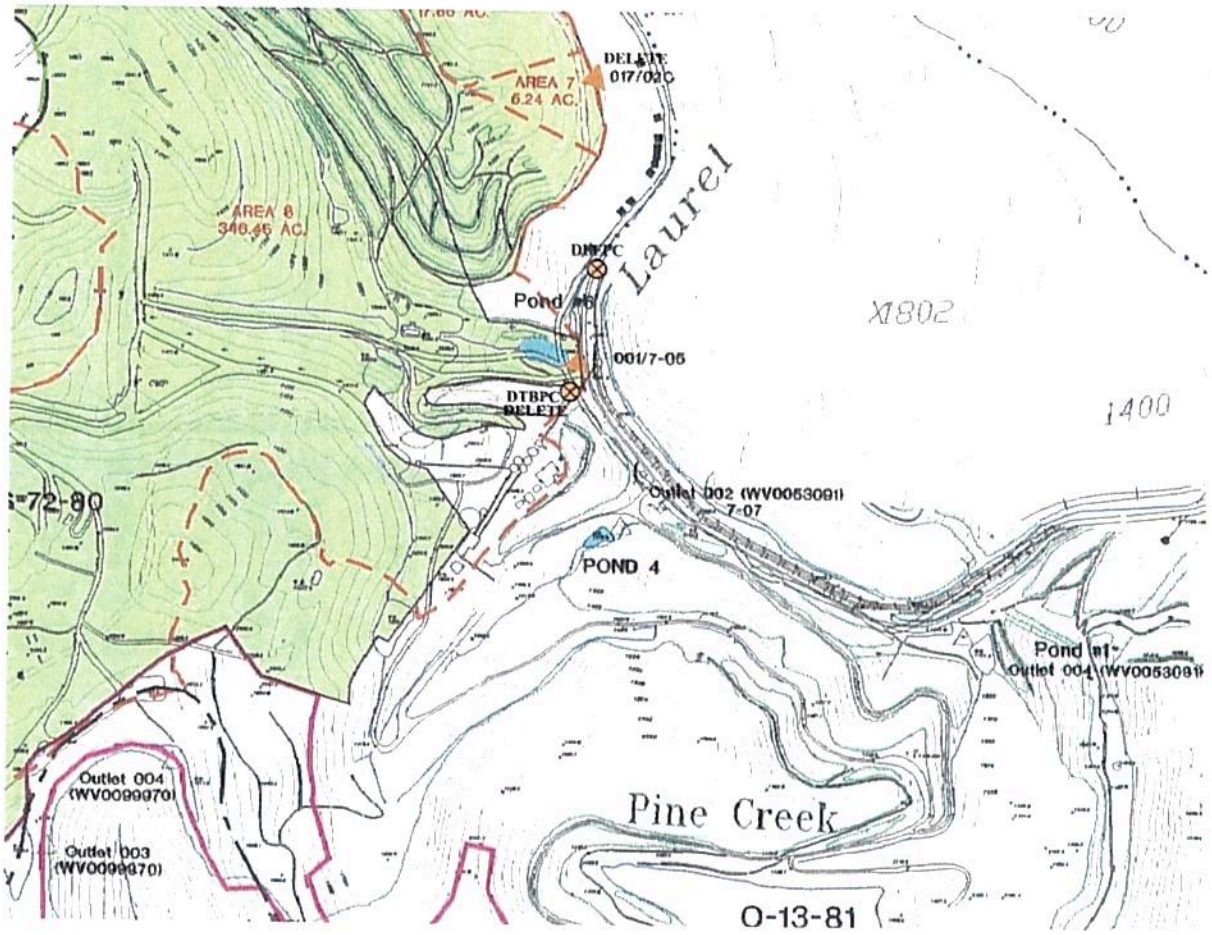
We further notify you, in accordance with section 520 of the federal Surface Mining Control and Reclamation Act ("SMCRA"), 30 U.S.C. § 1270 and 30 C.F.R. § 700.13, that Coal-Mac is in ongoing and continuing violation of certain federal and state regulations promulgated under SMCRA and the West Virginia Surface Coal Mining and Reclamation Act ("WVSCMRA") and certain conditions of its West Virginia Surface Mine Permits S007280, R000667, P060600, O001381, U501995, and S501301 as a result of its discharges of pollutants into Pine Creek, Laurel Fork, Left Fork of Pine Creek, Right Fork of Pine Creek, and Cow Creek. If within 60 days, Coal-Mac does not bring itself into full compliance with SMCRA, the regulations promulgated under SMCRA, the WVSCMRA, and Surface Mining Permits S007280, R000667, P060600, O001381, U501995, and S501301, as identified below we intend to file a citizen's suit in federal court seeking an injunction compelling Coal-Mac to come into compliance with the applicable statutes, regulations, and permits.

I. Factual Background

A. Existing Operations

Coal-Mac controls several surface mining permits in and around the Pine Creek watershed in Logan, County, West Virginia. In the early 1980's the West Virginia Department of Environmental Protection issued surface mining permit S007280 for the Hobet 7 Mine, which discharges water pursuant to WVNPDES Permit WV0068764. Pond No. 6, receiving drainage from the east side of that operation, discharges though Outlet 001 to Laurel Fork of the Right Fork of Pine Creek, itself a tributary of Island Creek of the Upper Guyandotte River. This nearly 500-acre facility began operations in 1992, and is currently in Phase 1 of reclamation.

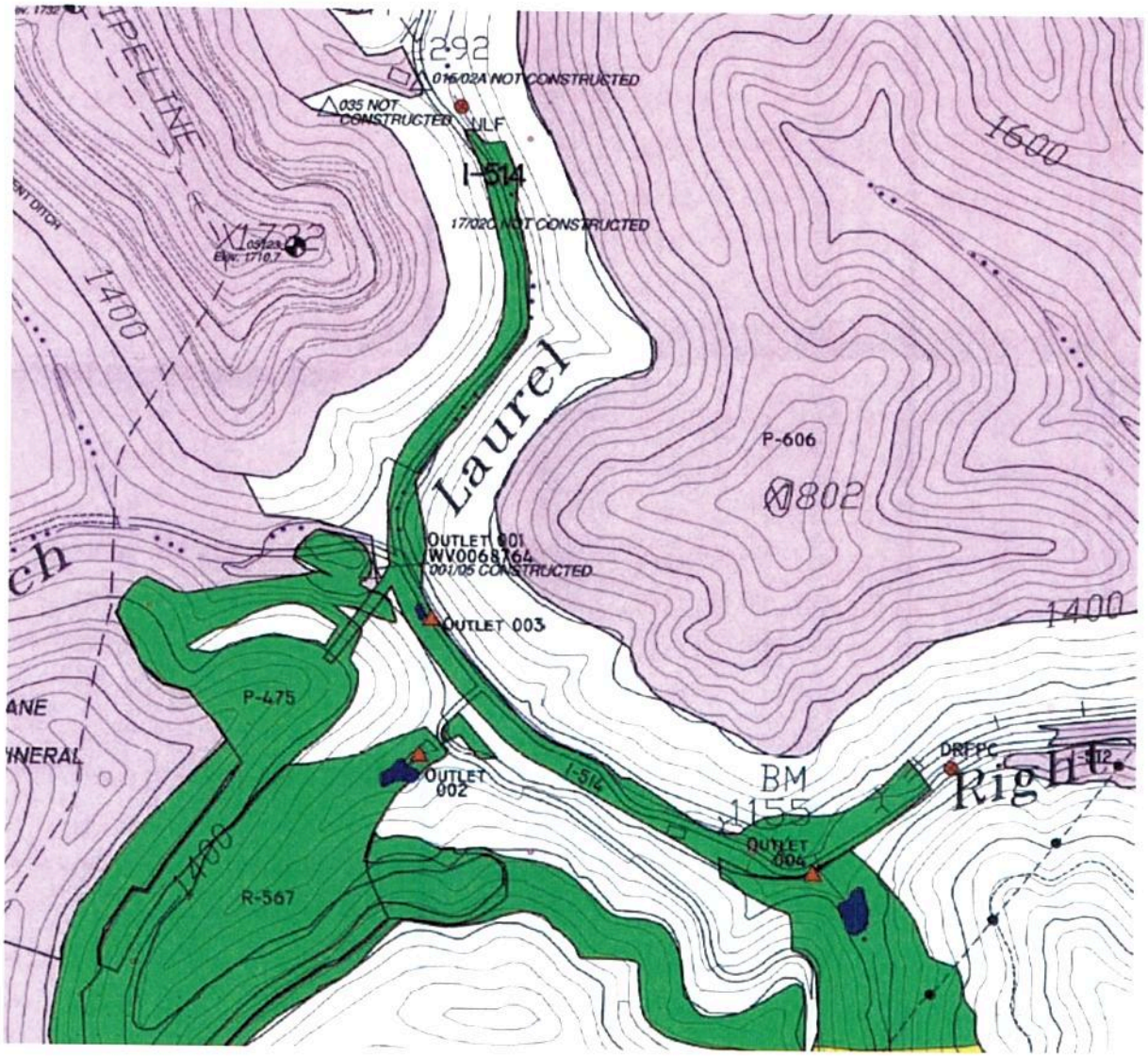
Figure 1.



When last measured in January 2015, Outlet 001 was discharging high levels of conductivity, total dissolved solids ("TDS") and sulfates into Laurel Fork. Sulfate levels were as high as 1050 mg/L, TDS measured 1192 mg/L, and Specific Conductivity ("conductivity") was as high as 1623 µS/cm.

Attendant to the Hobet 07 mining operations are at least two coal preparation plants/refuse disposal sites that discharge water pursuant to WVNPDES Permit WV0053091. Outlet 002 of WV0053091 discharges from Pond No. 4 of Coal Refuse Pond into Laurel Fork of the Right Fork of Pine Creek. This refuse facility, SMCRA Permit R000667 is no longer operational, but is still chemically treating water. Outlet 004 of Permit WV0053091 discharges from Pond 1, which drains a larger, reclaimed impoundment, into the same stream. This outlet drains a partially reclaimed refuse disposal area regulated pursuant to SMCRA Permit O001381.

Figure 2



(At the time of this permit map, outlet 001 of WV0068764 had not yet been constructed. It has since been completed and is currently discharging as described above).

Since at least January 2015, outlets 002 and 004 of permit WV0053091 have been discharging high levels of sulfates, TDS and conductivity into Laurel Fork and the Right Fork of Pine Creek.

Table 1.

Monitoring Point	Receiving Stream	Date	Flow (avg gpm)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
2	Right Fork	Jan-15	118	120	130	355	400	536	577
2	Right Fork	Feb. 2015	314	182	185	284	331	458	495
2	Right Fork	Mar-15	260	165	180	324	360	464	501
2	Right Fork	Apr-15	215	182	185	277	297	408	432
2	Right Fork	May-15	175	158	195	354	373	504	536
2	Right Fork	Jun-15	128	125	160	407	428	646	655
4	Laurel Fork	Jan-15	28	240	240	678	726	872	880
4	Laurel Fork	Feb. 2015	48	210	230	400	482	603	691
4	Laurel	Mar-15	?	240	340	648	887	809	1056
4	Laurel Fork	Apr-15	76	235	340	650	665	775	787
4	Laurel Fork	May-15	60	290	320	774	788	907	908
4	Laurel Fork	Jun-15	35	210	220	774	868	1008	1016

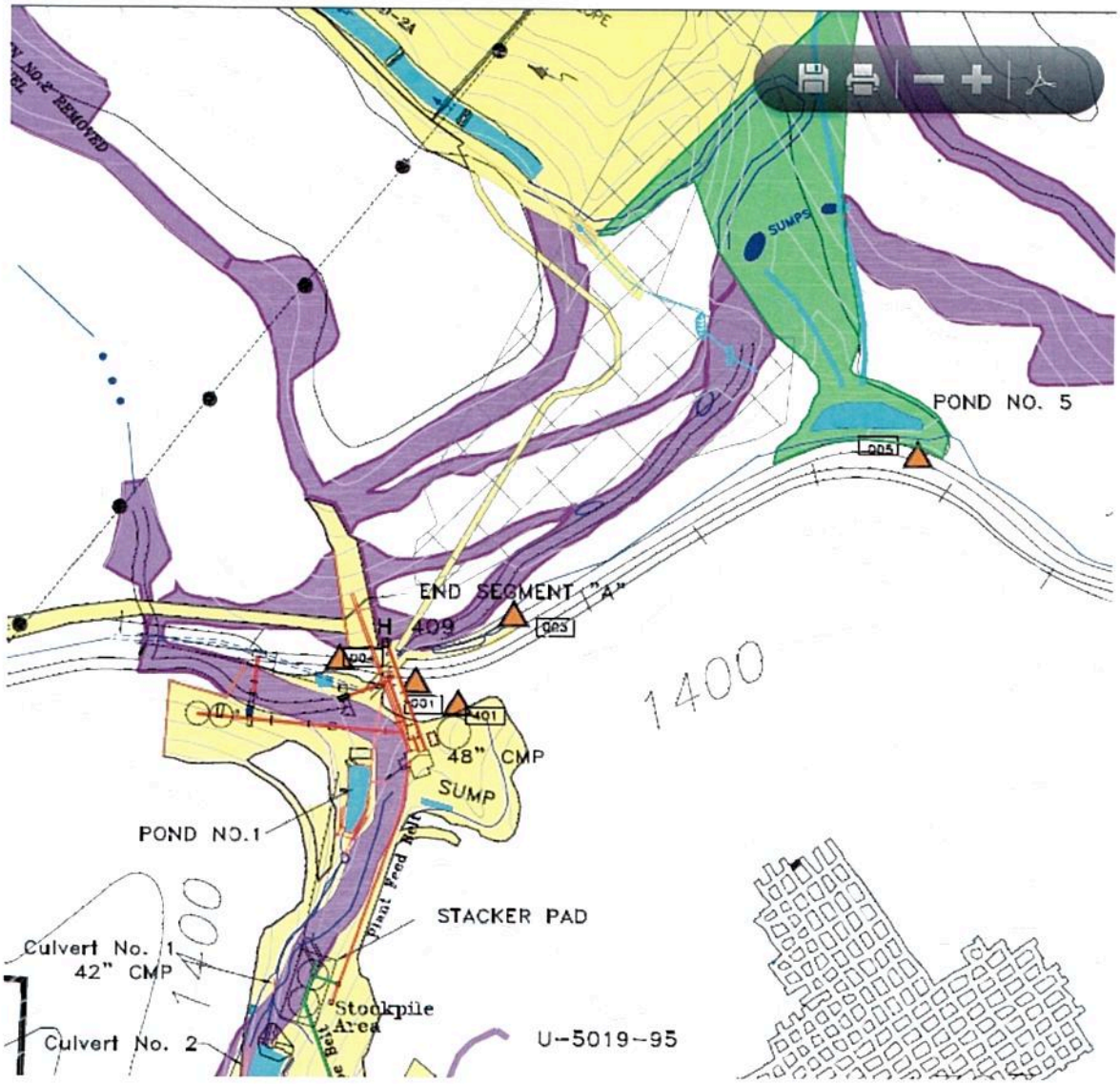
Coal-Mac monitors at one instream point above all of the above-mentioned outfalls, identified as "ULF", and another below those outfalls but before any other significant sources of sulfates, TDS, or conductivity reach the stream, identified as "DRFPC." (See Figure 2). A comparison of the monitoring data from those two sites shows the effect the outfalls are having on water quality.

Table 2

Monitoring Point	Receiving Stream	Date	Flow (avg CFS)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
ULF	Laurel Fork	Jan-15	1	55	60	86	92	161	165
ULF	Laurel Fork	Feb-15	1	63	65	106	107	175	197
ULF	Laurel Fork	Mar-15	1	63		64	132	184	192
ULF	Laurel Fork	Apr-15	2	69	78	134	148	194	197
ULF	Laurel Fork	May-15	1	108	125	224	226	331	342
ULF	Laurel Fork	Jun-15	0.5	112	115	274	298	392	420
DRFPC	Laurel Fork	Jan-15	15	222	310	494	713	712	983
DRFPC	Laurel Fork	Feb-15	21	170	200	548	599	702	789
DRFPC	Laurel Fork	Mar-15	28	175	180	468	572	658	701
DRFPC	Laurel Fork	Apr-15	18	210	310	514	520	696	704
DRFPC	Laurel Fork	May-15	18	345	380	823	935	1057	1218
DRFPC	Laurel Fork	Jun-15	14	245	300	723	771	1022	1107

Slightly downstream from the above-mentioned facilities, on the north side of Right Fork of Pine Creek is a mine and refuse area regulated pursuant to SMCRA Permit P060600. On this site, outlet 001 of WV/NPDES Permit WV0064858 discharges water draining from a refuse area, stockpile area, and the area around a preparation plant, as well as water from an underground mine permitted pursuant to SMCRA Permit U501995. Outlet 005 discharges flow from a surface mining area. Both of these outlets discharge into the Right Fork of Pine Creek.

Figure 3



Since at least January 2015, Outlets 001 and 005 of this permit have discharged high levels of sulfates, TDS, and conductivity into the Right Fork of Pine Creek.

Table 3

Monitoring Point	Receiving Stream	Date	Flow (avg gpm)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
1	Right Fork	Jan-15	175	120	140	328	409	448	460
1	Right Fork	Feb-15	185	125	125	259	268	384	390
1	Right Fork	Mar-15	198	185	190	304	336	454	477
1	Right Fork	Apr-15	172	92	135	279	289	394	407
1	Right Fork	May-15	145	138	150	326	344	462	471
1	Right Fork	Jun-15	98	128	155	412	468	547	549
5	Right Fork	Jan-15	19	350	360	680	763	884	938
5	Right Fork	Feb-15	30	250	340	502	607	667	750
5	Right Fork	Mar-15	52	345	350	626	759	790	892
5	Right Fork	Apr-15	48	340	360	706	759	852	579
5	Right Fork	May-15	42	290	320	830	838	976	1009
5	Right Fork	Jun-15	20	280	340	904	972	1158	1160

Instream monitoring at the mouth of the Right Fork of Pine Creek shows high levels of sulfates, TDS, and conductivity within the water column. The concentrations of those pollutants persist at high levels, despite the stream having much greater flow than at more upstream monitoring points.

Table 4

Monitoring Point	Receiving Stream	Date	Flow (avg CFS)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
DSRFPC	Right Fork	Jan-15	24	160	220	376	378	572	589
DSRFPC	Right Fork	Feb-15	32	155	180	398	438	546	621
DSRFPC	Right	Mar-	40	160	200	494	569	636	709

	Fork	15							
DSRFPC	Right Fork	Apr-15	30	165	230	428	465	594	624
DSRFPC	Right Fork	May-15	24	280	280	717	736	939	1034
DSRFPC	Right Fork	Jun-15	21	210	280	703	758	966	973

South of the Hobet 07 complex and its attendant prep plants and refuse facilities is the Coal-Mac Phoenix 4 mine. This is a 770-acre mine permitted pursuant to SMCRA Permit S501301. Discharges are regulated pursuant to WV/NPDES Permit Number WV1020561. Outlets 001 and 002 discharge runoff from mined areas to Cow Creek of Island Creek. (See Figure 4). On the other side of the ridge, Outlets 003, 004, 006, and 007 discharge runoff from mined areas into the Left Fork of Pine Creek. (See Figure 5).

On December 17, 2004, WVDEP issued a 401 certification to Coal-Mac for the CWA § 404 permitting of the Phoenix 4 Mine. Upon information and belief, this 401 certification incorporated both a General Mitigation Plan Agreement and a Mitigation and Compensation Agreement. The General Mitigation Plan Agreement was signed and effectuated on November 18, 2004.

Figure 4

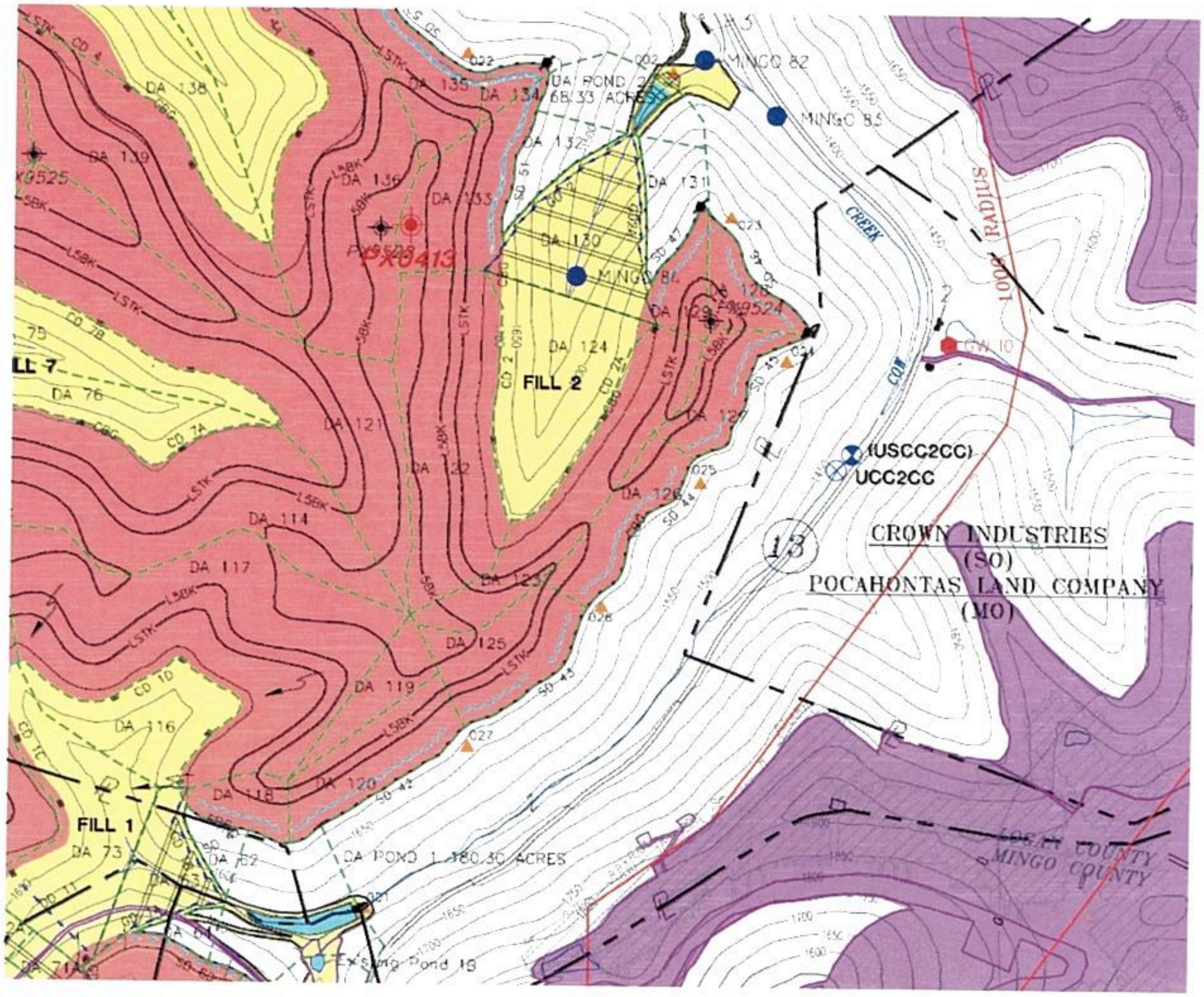
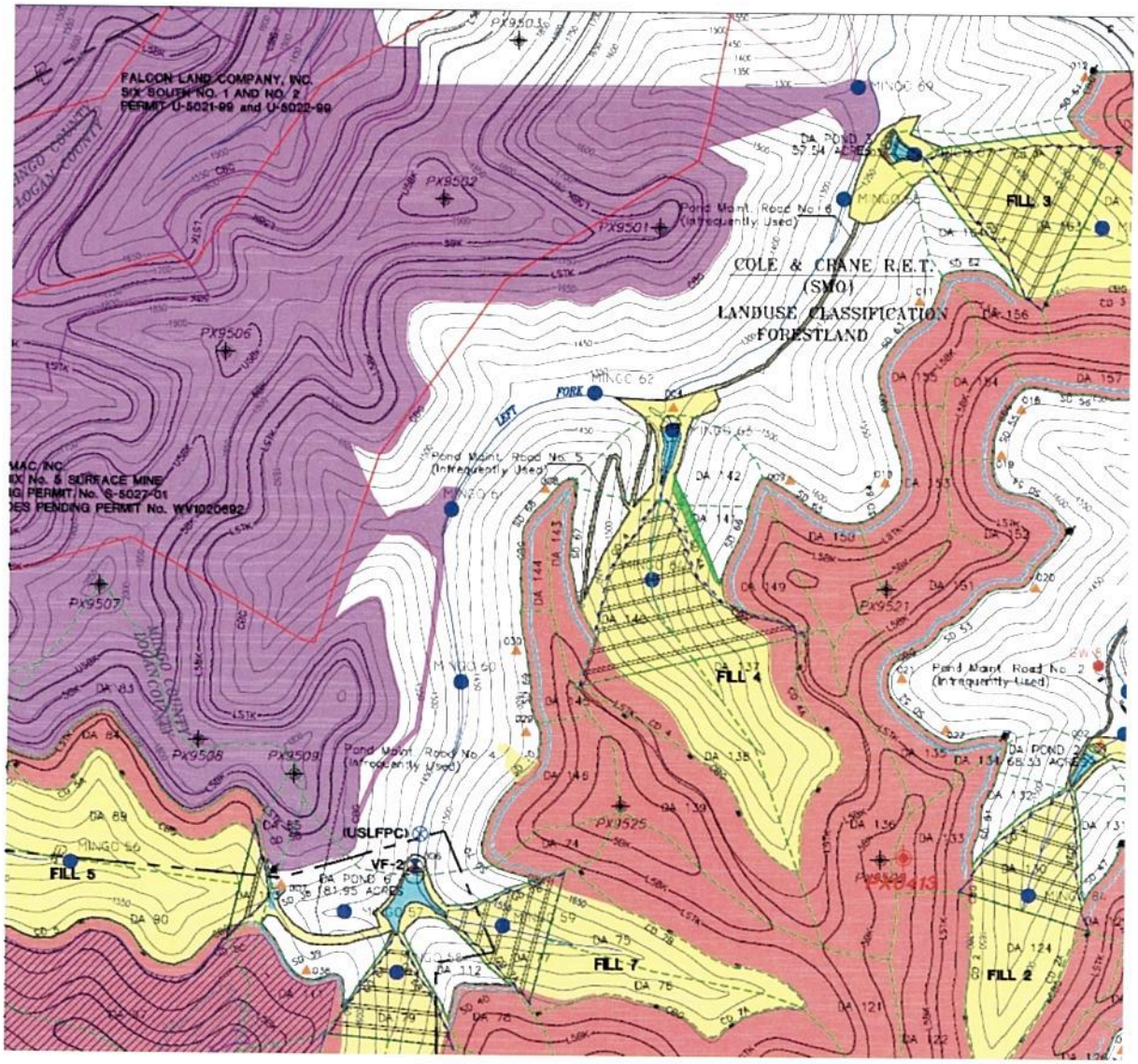

FILL 2
FILL 1
MINGO 82
MINGO 85
MINGO 84
DA POND 2 68.33 ACRES
DA POND 1 180.30 ACRES
Existing Pond 1B
PX0413
(USCC2CC)
UCC2CC
CROWN INDUSTRIES
(SO)
POCAHONTAS LAND COMPANY
(MO)
1000' RADIUS
COW CREEK
LOGAN COUNTY
MINGO COUNTY
GW 10

Figure 5



Since at least January 2015, Outlets 001, 002, 003, 004, 006, and 007 have discharged high levels of sulfate, TDS and conductivity into the Right Fork of Pine Creek and Cow Creek.

Table 5

Monitoring Point	Receiving Stream	Date	Flow (avg gpm)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
1	Cow Creek	Jan-15	127.5	320	420	800	827	1073	1116
1	Cow Creek	Feb. 2015	230	286	340	532	647	780	855
1	Cow Creek	Mar-15	318	225	230	686	718	880	897
1	Cow Creek	Apr-15	238	190	260	744	198	920	938
1	Cow Creek	May-15	160	240	280	979	985	1118	1159
1	Cow Creek	Jun-15	82	180	260	1015	1118	1321	1336
2	Cow Creek	Jan-15	26	460	720	1100	1146	1313	1373
2	Cow Creek	Feb. 2015	38	490	500	798	857	1056	1063
2	Cow Creek	Mar-15	24	470	720	945	1080	1114	1202
2	Cow Creek	Apr-15	25	400	400	1131	1131	1292	1292
2	Cow Creek	May-15	No Flow						
2	Cow Creek	Jun-15	25	500	500	1482	1482	1806	1806
3	Left Fork	Jan-15	90	270	300	525	538	732	773
3	Left Fork	Feb. 2015	125	150	190	378	464	569	662
3	Left Fork	Mar-15	158	200	280	647	748	836	977
3	Left Fork	Apr-15	151	300	350	506	533	650	682
3	Left Fork	May-15	110	140	160	551	587	676	708
3	Left Fork	Jun-15	80	380	380	865	865	1169	1169
4	Left Fork	Jan-15	820	290	380	1229	11257	1432	1454
4	Left Fork	Feb. 2015	240	415	520	864	1105	1058	1284
4	Left Fork	Mar-15	280	1015	1750	1434	1763	1628	2005
4	Left Fork	Apr-15	268	650	760	1048	1120	1204	1218

4	Left Fork	May-15	220	290	400	1096	1115	1234	1263
4	Left Fork	Jun-15	135	550	600	1910	1935	2128	2154
6	Left Fork	Jan-15	77	320	340	854	861	1126	1200
6	Left Fork	Feb. 2015	158	250	320	56	828	780	1052
6	Left Fork	Mar-15	258	290	300	1002	1036	1110	1183
6	Left Fork	Apr-15	212	360	400	1052	1111	1190	1224
6	Left Fork	May-15	193	210	280	886	903	1098	1106
6	Left Fork	Jun-15	96	250	360	950	976	1156	1246
7	Left Fork	Jan-15	6	330	380	742	787	1011	1021
7	Left Fork	Feb. 2015	5	225	270	640	644	888	897
7	Left Fork	Mar-15	13	325	350	688	722	834	848
7	Left Fork	Apr-15	12	155	240	576	591	760	768
7	Left Fork	May-15	6	225	300	736	812	936	949
7	Left Fork	Jun-15	22	230	300	847	848	1087	1088

There are no remaining unaffected headwaters of the Left Fork of Pine Creek. Two instream monitoring locations on this this waterway show that Outlets 003, 004, 006, and 007 have had a negative effect on water quality.

Table 6

Monitoring Point	Receiving Stream	Date	Flow (avg CFS)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
DSLFPC	Left Fork	Jan-15	5	285	290	522	573	745	819
DSLFPC	Left Fork	Feb-15	5	212	260	516	694	644	848
DSLFPC	Left Fork	Mar-15	5	325	380	600	607	754	764
DSLFPC	Left Fork	Apr-15	5	310	330	628	718	762	828
DSLFPC	Left Fork	May-15	5	390	460	943	985	1092	1172
DSLFPC	Left Fork	Jun-15	3	190	200	864	963	1096	1135
USLFPC	Left Fork	Jan-15	2	200	230	619	695	750	784
USLFPC	Left Fork	Feb-15	3	265	380	524	688	645	808

USLFPC	Left Fork	Mar-15	3	260	280	588	590	756	777
USLFPC	Left Fork	Apr-15	2	275	320	581	636	758	821
USLFPC	Left Fork	May-15	2	370	500	909	946	1095	1198
USLFPC	Left Fork	Jun-15	2	160	180	865	913	1104	1123

Similar to the situation on the Left Fork of Pine Creek, there are no monitoring stations above the uppermost outlet on Cow Creek. Instream monitoring between Outlet 001 and 002 (USCC2CC) and below both outfalls (DSCC), however, shows an influence of those outlets on water quality.

Table 7

Monitoring Point	Receiving Stream	Date	Flow (avg CFS)	Sulfates (avg mg/L)	Sulfates (max mg/L)	TDS (avg mg/L)	TDS (max mg/L)	Sp. Cond. (avg µS/cm)	Sp. Cond. (max µS/cm)
DSCC	Cow Creek	Jan-15	4	130	140	380	468	536	633
DSCC	Cow Creek	Feb-15	6	170	195	280	348	442	514
DSCC	Cow Creek	Mar-15	9	160	190	347	440	488	593
DSCC	Cow Creek	Apr-15	6	168	195	348	387	484	513
DSCC	Cow Creek	May-15	5	320	380	592	637	778	873
USCC2CC	Cow Creek	Jan-15	2	188	190	364	406	569	620
USCC2CC	Cow Creek	Feb-15	4	182	195	278	348	440	514
USCC2CC	Cow Creek	Mar-15	5	180	240	344	437	484	588
USCC2CC	Cow Creek	Apr-15	3	152	195	373	392	484	507
USCC2CC	Cow Creek	May-15	3	365	370	588	650	782	871
USCC2CC	Cow Creek	Jun-15	2	150	180	522	602	822	931

Pine Creek, the Right Fork of Pine Creek, and Cow Creek are all listed on the final 2012 303(d) list of impaired streams as impaired for failure to meet biological conditions. Each of those streams also appears on the draft 2014 303(d) list, which has yet to be approved by EPA. The most recent WVSCI scores taken by the WVDEP are 40.59 for the Right Fork of Pine

Creek, 57.64 for Pine Creek, and 46.86 for Cow Creek. Each of these scores is below the WVDEP threshold for impairment—68.[1]

B. Historical Conditions

Prior to mining, water quality in the Right Fork of Pine Creek watershed (including Laurel Fork) was characterized by low concentrations of dissolved ions and good water quality. For example, in the 1982 application for WV/NPDES Permit Number WV0053091 the baseline water quality exhibited conductivity between 65 µS/cm and 135 µS/cm. Additionally, current monitoring at instream monitoring locations above the major outlets on Laurel Fork of the Right Fork show significantly lower levels of ionic pollutants than other monitoring stations in the watershed. *See* Figures 2 and 4.

Prior to the issuance of permits for the Phoenix 4 permit, the company was required to submit an Environmental Information Document ("EID") to regulators, complete with benthic monitoring. This monitoring revealed exceptional biological scores in the Left Fork of Pine Creek and in Cow Creek.

Monitoring Point	WVSCI Score	EPT Taxa
Left Fork (Downstream Valley Fills 6 and 7)	79.54	7
Left Fork (Downstream Valley Fills 6 and 7)	89.81	11
Left Fork (Downstream Valley Fills 6 and 7)	72.59	8
Left Fork (Downstream Valley Fills 6, 7 and 4)	107.61	16
Left Fork (Downstream Valley Fills 6, 7, 4 and 3)	107.38	16
Cow Creek (Downstream of Valley Fills 1 and 2)	89.92	12
Cow Creek (Downstream of Valley Fill 1)	92.26	10
Cow Creek (Downstream of Valley Fill 1)	89.8	11

Water quality in these streams was much higher than it is today. Baseline conductivity in Cow Creek was measured at 363 µS/cm and in Left Fork between 90 and 110.

C. Discharges of Ionic Pollution, Like that from Coal-Mac's Facilities, Causes Biological Impairment in Appalachian Stream.

Scientific research has shown that levels of conductivity above ~300 uS/cm and elevated ionic pollution such as high sulfate levels are common below Appalachian mine sites and lead to extirpation of invertebrate genera (EPA 2011; Bernhardt et al. 2012; Cormier and Suter 2013; Cormier et al. 2013a). In 2011, EPA scientists summarized the existing science connecting conductivity and biological degradation in an EPA report entitled, "A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams." That report, which was peer-reviewed by top scientists on EPA's Science Advisory Board, used EPA's standard method for deriving water quality criteria to derive a conductivity benchmark of 300 µS/cm. Id. at xiv-xv.

[1] The WVDEP reports no scores for the Left Fork of Pine Creek, however, given the levels of ionic pollutants in that stream and the status of surrounding waters, the undersigned have reasonable belief that the Left Fork stream is impaired biologically as well.

According to the species sensitivity distribution in the benchmark, on average, five percent of species are lost when conductivity rises to 295 µS/cm, over 50% are lost at 2000 µS/cm, and close to 60% are lost at 3000 µS/cm. Id. at 18. EPA considered potential confounding factors, including habitat, temperature, deposited sediments and pH, and concluded that none of them altered the relationship between conductivity and biological decline or the benchmark value of 300 µS/cm. Id. at 41, B-22. EPA found that the loss of aquatic species from increased conductivity was "a severe and clear effect." Id. at A-37. EPA also conducted a detailed causal assessment and concluded that there is a causal relationship between conductivity and stream impairment in West Virginia. Id. at A-39. Finally, EPA's benchmark report analyzed the relationship between the WVSCI biological impairment threshold and conductivity levels, and found that a WVSCI score of 64 (close to the impairment threshold of 68) corresponds to streams with conductivity of about 300 µS/cm on average. Id. at A-36. A statistical analysis included in the benchmark determined that at a conductivity level of 300 µS/cm a stream is 59% likely to be impaired and at 500 µS/cm a stream is 72% likely to be impaired. Id.

The ions discharged by Coal-Mac are consistent with those associated with coal mining pollution in this region (Pond et al. 2008; Palmer et al. 2010; Bernhardt and Palmer 2011; Lindberg et al. 2012; Pond et al. 2010; Pond et al. 2012; Pond et al. 2014; Kunz 2013). The ionic mixture of calcium, magnesium, sulfate, and biocarbonate in alkaline mine water causes the loss of aquatic macroinvertebrates in Appalachian areas where surface coal mining is prevalent; it is the mixture of ions that causes the biological impairment (Cormier et al. 2013b; Cormier and Suter 2013). This mixture also has significant adverse effects on fish assemblages (Hitt 2014; Hopkins 2013) and has toxic effects on aquatic life, including mayflies (Kunz 2013; Echols 2010; Kennedy 2004). The following table illustrates concentrations of each of these ions at the time of their respective permit renewals.

Permit No.	Outlet	Sulfates (mg/L)	Alkalinity (as $CaCO_3$)	Hardness (as $CaCO_3$)	Mg (mg/L)
WV0068764	001	400	612	1125	NR*
WV0053091	002	223	200	250	NR*
WV0053091	004	558	120	500	NR*
WV0064858	001	171	82	335	NR*
WV0064858	005	359	254	209	NR*
WV1020561	001	260		388	47
WV1020561	002	105		190	23
WV1020561	003	51		160	17
WV1020561	004	133		199	24
WV1020561	006	330		408	49
WV1020561	007**				

* While Coal-Mac did not report magnesium samples from these outfalls, the latest WVDEP water quality monitoring in the Right Fork of Pine Creek reveals elevated magnesium levels of 100 ppm.

** Outlet 007 is represented by the data from Outlet 006 in the permit application.

In 2012, Drs. Emily Bernhardt, Ryan King and others concluded that,

> The extent of surface mining within catchments is highly correlated with the ionic strength and sulfate concentrations of receiving streams. Generalized additive models were used to estimate the amount of watershed mining, stream ionic strength, or sulfate concentrations beyond which biological impairment (based on state biocriteria) is likely. We find this threshold is reached once surface coal mines occupy >5.4% of their contributing watershed area, ionic strength exceeds 308 $\mu S\ cm^{-1}$, or sulfate concentrations exceed 50 $mg\ L^{-1}$.

(Bernhardt, et al. 2012)

Coal-Mac's mining operations make up a large portion of the Pine Creek watershed, and even greater portions of its tributaries, including Left Fork of Pine Creek, the Right Fork of Pine Creek, and Cow Creek. The Hobet 07 mine is more than 500 acres, and the Phoenix 4 mine is 770 acres. While there is other mining activity in these watersheds (largely conducted by Coal-Mac), the outlets mentioned in this notice are the only ones that regularly flow into the Left and Right Forks of Pine Creek and into Cow Creek.

In sum, the available evidence shows that, as a result of Coal-Mac's mining in the tributaries of Pine Creek, that creek, it's Left and Right Forks and Cow Creek all have high levels of ionic pollution commonly associated with alkaline mine drainage in the region and known to cause impairment of aquatic life. The high levels of ionic pollution in alkaline mine drainage from the discharge of Hobet's mines has caused or contributed to the impairment of these streams.

In addition, because of solar heating of the sediment control ponds upstream of Outlet 001 of WV/NPDES Permit No. WV0068764, Outlets 002 and 004 of WV/NPDES Permit No. WV0053091, Outlets 001 and 005 of WV/NPDES Permit No. WV0064858, and Outlets 001, 002, 003, 004 and 006 of WV/NPDES Permit No. WV1020561, Coal-Mac has discharged a pollutant (i.e. heat) that has caused or materially contributed to increased temperatures in downstream waters which may be a contributing factor in the observed biological impairment. Those discharges of excess heat occurs each and every day the relevant pond discharges into a received stream; they are ongoing.

II. LEGAL CLAIMS

A. CLEAN WATER ACT VIOLATIONS

Section 301 of the CWA prohibits the discharge of any pollutant by any person, except in compliance with a permit. WV/NPDES Permits WV0068764, WV0053091, WV0064858, and WV1020561 allow Coal-Mac to discharge specified pollutants into West Virginia waters. Citizens may sue any person who violates a term or condition of an NPDES Permit. Each of Coal-Mac's WV/NPDES permits prohibits discharges that cause or materially contribute to violations of applicable water quality standards. 47 C.S.R. § 30-5.1.f. WVDEP defines its applicable water quality standards to include narrative standards. 47 C.S.R. § 2-3.2. In addition,

federal regulations require states to issue NPDES permits that require compliance with "State narrative criteria for water quality." 40 C.F.R. §§ 122.44(d)(1), 123.25(a)(15).

The permit condition prohibiting discharges that cause or contribute to water quality standards violations is enforceable in a citizen suit. Ohio Valley Envtl. Coalition, Inc. v. Alex Energy, Inc., 12 F. Supp. 3d 844 (S.D. W. Va. 2014); Ohio Valley Envtl. Coalition, Inc. v. Elk Run Coal Co., 24 F. Supp. 3d 532 (S.D. W. Va. 2014); Ohio Valley Envtl. Coalition, Inc. v. CONSOL of Kentucky, Inc., Civ. No. 2:13-cv-5005, 2014 WL 1761938 at *3 (S.D. W. Va. Apr. 30, 2014); Ohio Valley Envtl. Coalition, Inc. v. Fola Coal Co., LLC, Civ. No. 2:12-cv-3750, 2013 WL 6709957 at *21 (S.D. W. Va. Dec. 19, 2013); Ohio Valley Envtl. Coalition, Inc. v. Marfork Coal Co., Inc., 966 F. Supp. 2d 667, 685 (S.D. W. Va. 2013). Moreover, citizens may enforce narrative state water quality standards through this type of permit condition. Elk Run, 24 F. Supp. 3d at 537. See also Northwest Envtl. Advocates v. City of Portland, 56 F.3d 979, 986-988 (9th Cir. 1995); New Manchester Resort & Golf, LLC v. Douglasville Development, LLC, 734 F. Supp.2d 1326, 1336-39 (N.D. Ga. 2010) (allowing citizen enforcement of narrative water quality standard prohibiting water discoloration); Swartz v. Beach, 229 F. Supp.2d 1239, 1270-72 (D. Wyo. 2002) (allowing citizen enforcement of narrative water quality standard prohibiting water degradation that causes a measurable decrease in crop or livestock production). "[S]tate standards, including narrative as opposed to numerical criteria, incorporated into an NPDES permit may be enforced through a citizens' suit." Gill v. LDI, 19 F. Supp. 2d 1188, 1195 (W.D. Wash. 1998).

West Virginia's narrative water quality standard provides that:

> No . . . wastes present in any waters of the state shall cause therein or materially contribute to any of the following conditions thereof: . . .
>
> 3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life; . . . and
>
> 3.2.i. Any other condition . . . which adversely alters the integrity of the waters of the State including wetlands; no significant adverse impacts to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

47 C.S.R. §§ 2-3.2.e & 2-3.2.i. Thus, the standard is violated if wastes discharged from a mining operation "cause" or "materially contribute" materials "that are harmful . . . or toxic to . . . aquatic life" or that have "significant adverse impacts to . . . biological components of aquatic ecosystems." "Biological monitoring is one method of testing [for] compliance with narrative criteria." American Paper Institute, 996 F.2d 346, 350 (D.C. Cir. 1993).

Coal-Mac's discharges from Outlets regulated by WV/NPDES Permits WV0068764, WV0053091, WV0064858, and WV1020561, as listed above, have violated the "harmful . . . to . . .aquatic life" and "significant adverse impact" components of West Virginia's narrative standards. 47 C.S.R. §§ 2-3.2.e & 3.2.i. WVDEP has measured the benthic community downstream from those discharges and found the WVSCI scores are well below 68—the

biological impairment threshold. Instream sampling of those streams has shown high levels of ionic chemicals such as sulfates, TDS, and conductivity, which are strongly associated with biological impairment and harm to aquatic life.

Coal-Mac has caused, or materially contributed to, violations of the narrative water quality standards, and has therefore violated its WV/NPDES permits and the CWA. Coal-Mac's WV/NPDES permits each incorporate the "water quality standards provision in § 47–30–5.1.f [which] resulted in an explicit, enforceable permit condition." OVEC v. Fola Coal Co., LLC, 2013 WL 6709957, at *11 (S.D.W. Va. Dec. 19, 2013); See also Upper Chattahoochee Riverkeeper v. City of Atlanta, 986 F. Supp. 1406, 1427 (N.D. Ga. 1997) (city found liable for violating water quality standard for fecal coliform bacteria because its "discharges correlate generally (although not perfectly) with measurements of fecal coliform bacteria in the receiving streams that are thousands of times higher than they should be" and there was no "other source that is contributing such massive amounts of fecal coliform bacteria to explain the level of fecal coliform bacteria in the receiving streams below" its treatment facilities).

Coal-Mac's water quality standard violations, described above, also place it in violation of the terms and conditions of the Section 401 certification issued by WVDEP for the Phoenix 4 Mine, and the General Mitigation Plan Agreement, signed pursuant to that certification. Before the U.S. Army Corps of Engineers may issue a Section 404 permit, it must obtain certification from the applicable state that the project will not violate the state's water quality standards. 33 U.S.C. § 1341 ("CWA § 401"). WVDEP issued such certification for the Phoenix 4 Mine on December 17, 2004. Upon information and belief, that certification requires compliance with the General Mitigation Plan Agreement between Coal-Mac and the WVDEP signed on November 18, 2004. Those conditions serve as federally enforceable effluent limitations on Coal-Mac's discharges from the Phoenix 4 Surface Mine. 33 U.S.C. § 1365(f)(5).

Coal-Mac has violated and is violating three of those conditions at its Phoenix 4 Mine. First, Coal-Mac is violating the condition that "[t]he permittee will comply with water quality standards as contained in West Virginia Code of State Regulations, Requirements Governing Water Quality Standards, Title 46, Series 1." As described above, Coal-Mac's discharges and mining activities are causing or materially contributing to chemical and biological impairment of the downstream waters in violation of West Virginia water quality standards set forth at 47 C.S.R. §§ 2-3.2.e & 2-3.2.i.

Second, Coal-Mac is violating the condition that provides, "[s]poil materials from the watercourse or onshore operations, including sludge deposits, will not be dumped in the watercourse, or deposited in wetlands or other areas where the deposit may adversely affect the surface or ground waters of the state." The spoil materials from Coal-Mac's operations on the Phoenix 4 mine have affected waters of the state, i.e., the Left Fork of Pine Creek and Cow Creek, by causing or materially contributing to chemical and biological impairment of that stream and the streams into which they flow, in violation of West Virginia water quality standards set forth at 47 C.S.R. §§ 2-3.2.e & 2-3.2.i.

Third, Coal-Mac is violating the condition that provides, "[f]ill is to be clean, non-hazardous and of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters." The fill used by Coal-Mac in the fills on the Phoenix 4 mine has adversely affected the biological, chemical, and physical properties of the receiving waters as evidenced by failing WVSCI scores in the Left Fork of Pine Creek and the impaired status of Cow Creek.

The CWA authorizes citizens to sue "any person . . . who is alleged to be in violation of . . . an effluent standard or limitation under this chapter." 33 U.S.C. § 1365(a)(1). An "effluent standard or limitation under this chapter" is defined to include "a certification under section 1341 of this title." Id. § 1365(f)(5). A person who violates a condition in a Section 401 certification is therefor in violation of the CWA and subject to a citizen enforcement action under the CWA. Stillwater of Crown Point Homeowners Ass'n, Inc. v. Stiglich, 999 F. Supp. 2d 1111, 1124–25 (N.D. Ind. 2014); N.C. Shellfish Growers Ass'n v. Holly Ridge Associates, LLC, 200 F. Supp. 2d 551, 558 (E.D.N.C. 2001).

Based on the available evidence and the absence of any corrective measures taken by Coal-Mac, we believe its violations of the CWA are ongoing. If Coal-Mac does not cease these violations within sixty days, we intend to bring a citizen suit against it under Section 505(a)(1) of the CWA seeking civil penalties and injunctive relief.

B. Surface Mining Violations

Section 520(a)(1) of SMCRA authorizes citizens to commence civil actions against any person alleged to be in violation of rules, orders, or permits, issued pursuant to SMCRA. 30 U.S.C. § 1270(a)(1). West Virginia has a federally-approved mining program under SMCRA which is administered by the WVDEP pursuant to the West Virginia Surface Coal Mining Reclamation Act ("WVSCMRA"), W. Va. Code § 22-3-1 through 32a. Powellton, 662 F. Supp. at 518. Violations of a federally-approved state program are enforceable in federal court under SMCRA's citizen suit provision. Molinary v. Powell Mountain Coal Co., Inc., 125 F.3d 231, 237 (4th Cir. 1997). We believe that Coal-Mac is in continuous and ongoing violation of the following:

(1) 38 C.S.R. § 2-14.5, promulgated under WVSCMRA;
(2) 30 C.F.R. §§ 816.41(a) and 817.41(a), promulgated under SMCRA;
(3) 30 C.F.R. §§ 816.42 and 817.42, promulgated under SMCRA;
(4) The permit conditions incorporated into West Virginia Surface Mining Permit S501300 by operation of 38 C.S.R. § 2-3.33.c, promulgated under WVSCMRA.

Coal-Mac's is currently violating SMCRA as evidenced by failing WVSCI scores in streams adjacent to, and/or downstream from, its operations. These violations have been ongoing since at least 2012, as evidenced by the placement of Pine Creek, its Right Fork, and Cow Creek on the WVDEP's 303(d) List.

Section 506 of SMCRA prohibits surface coal mining operations without a permit from the Office of Surface Mining Reclamation and Enforcement ("OSMRE") or from an approved

state regulatory authority. 30 U.S.C. § 1256. Coal-Mac holds SMCRA Permits S007280, R000667, P060600, O001381, U501995, and S501301, issued by WVDEP. The WVSCMRA provides that "[a]ny permit issued by the director pursuant to this article to conduct surface mining operations shall require that the surface mining operations meet all applicable performance standards of this article and other requirements set forth in legislative rules proposed by the director." W. Va. Code § 22-3-13(a). In turn, WVDEP's regulations under that statute provide that "[t]he permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Act, and this rule." 38 C.S.R. § 2-3.33.c; Powellton, 662 F. Supp.2d at 518.

The federal performance standards under SMCRA mandate that all discharges from permitted mining operations "be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 C.F.R. Part 434. 30 C.F.R. §§ 816.42 & 817.42. The State program prescribes a similar standard: "Discharge from areas disturbed by surface mining shall not violate effluent limitations or cause a violation of applicable water quality standards." 38 C.S.R. § 2-14.5.b (emphasis added).

As described above, Coal-Mac's discharges from facilities regulated pursuant to SMCRA Permits S007280, R000667, P060600, O001381, U501995, and S50130, have caused violations of the narrative water quality standards for protection of aquatic life. Consequently, Coal-Mac is in violation of the state and federal performance standards that prohibit mining operation from causing violations of water quality standards.

In addition, Coal-Mac's mining operations have resulted in impermissible material damage to the hydrologic balance. The performance standards under WVSMCRA mandate that "[a]ll surface mining and reclamation activities shall be conducted . . . to prevent material damage to the hydrologic balance outside the permit area." 38 C.S.R. § 2-14.5. At a minimum, "material damage" includes violations of water quality standards. Ohio River Valley Environmental Coalition, Inc. v. Castle, Civ. No. 3:00-cv-0058, Memo. Opinion & Order at 12-13 (S.D. W. Va. June 14, 2000). Accordingly, the water quality standards violations described above constitute material damage to the hydrologic balance and are actionable in a SMCRA citizen suit against Coal-Mac.

Moreover, Coal-Mac has a legal duty to treat its effluent to ensure that it does not violate water quality standards. Federal and State performance standards require that, , "[i]f drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and § 816.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls." 30 C.F.R. § 816.41(d)(1); see also 38 C.S.R. § 2-14.5.c ("Adequate facilities shall be installed, operated and maintained using the best technology currently available in accordance with the approved preplan to treat any water discharged from the permit area so that it complies with the requirements of subdivision 14.5.b of this subsection."). The violations identified herein show unequivocally that Coal-Mac's existing treatment methods are insufficient to meet that requirement. Thus, the performance standards require Coal-Mac to construct

systems that will effectively treat its effluent to levels that comply with all applicable water quality standards.

Finally, Coal-Mac's violations of the performance standards that prohibit violations of water quality standards and material damage, and that require adequate treatment to avoid such violations are violations of its mining permits. By operation of 38 C.S.R. § 2-33.c., those permits incorporate the performance standards discussed in the letter as terms of the permits themselves. Consequently, Coal-Mac is violating is SMCRA permits.

III. CONCLUSION

As discussed above, if Coal-Mac fails to come into compliance with the Clean Water Act, the terms of WV/NPDES Permits WV0068764, WV0053091, WV0064858, and WV102056, SMCRA, surface mining regulations, and the conditions of SMCRA Permits S007280, R000667, P060600, O001381, U501995, and S50130, we intend to file a citizen's suit under Section 505(a)(1) of the Clean Water Act seeking civil penalties and injunctive relief, as well as a citizen suit under section 520(a)(1) of SMCRA, seeking a court order compelling Coal-Mac to come into compliance with the law. Be aware that this notice is sufficient to allow us to sue Coal-Mac for any post-notice violations related to the violations described herein. See generally, Public Interest Research Group of N.J., Inc. v. Hercules, Inc., 50 F.3d 1239 (3rd Cir. 1995).

If Coal-Mac has taken any steps to eradicate the underlying cause of the violations described above, or if Coal-Mac believes that anything in this letter is inaccurate, please let us know. If Coal-Mac does not advise us of any remedial steps during the 60-day period, we will assume that no such steps have been taken and that violations are likely to continue. Additionally, we would be happy to meet with Coal-Mac or its representatives to attempt to resolve these issues within the 60-day notice period.

Sincerely,

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